UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,227	03/25/2004	Hiroshi Kyusojin	450100-05089	6544
	7590 06/03/200 AWRENCE & HAUG	EXAMINER		
745 Fifth Avenue			HOLDER, ANNER N	
New York, NY 10151			ART UNIT	PAPER NUMBER
			2621	
			MAIL DATE	DELIVERY MODE
			06/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)				
Office Action Summary		10/809,227	KYUSOJIN, HIROSHI				
		Examiner	Art Unit				
		ANNER HOLDER	2621				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL'CHEVER IS LONGER, FROM THE MAILING DAMASSION of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Of period for reply is specified above, the maximum statutory period or re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1) 又	Responsive to communication(s) filed on <u>02/03</u>	5/09					
·							
	, 						
٥)ا	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
	closed in accordance with the practice under 2	-x parte Quayre, 1000 0.b. 11, 40					
Disposit	ion of Claims						
4)🛛	4)⊠ Claim(s) <u>1,2,4,5,7,15,18 and 21</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	5) Claim(s) is/are allowed.						
6)🖂	6) Claim(s) <u>1,2,4,5,7,15,18 and 21</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/o	r election requirement.					
Applicat	ion Papers						
9)□	The specification is objected to by the Examine	er					
•	10)⊠ The drawing(s) filed on <u>03/25/04</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
19/6	Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)□	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
	ınder 35 U.S.C. § 119						
	-						
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)	a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	t(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application							
Paper No(s)/Mail Date 6) Other:							

Art Unit: 2621

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 02/05/09 have been fully considered but they are not persuasive. Regarding Applicant's arguments the Examiner respectfully disagrees. Shiotsu teaches a means for measuring the amount of energy that was consumed during the decoding process by looking at the remaining capacity of the battery. [col. 6] lines 10-50] Further, Shiotsu teaches a viewing-duration predicting using the remaining battery capacity. [col. 5 lines 5-22 emphasis lines 14-20; col. 6 lines 10-50] The system disclosed in Shiotsu takes into account the power consumption required for decoding. [col. 5 lines 14-20] It is well known in the art that changing from HDTV to SDTV is an adjustment to the image quality and the lower resolution requires the decoder to change its parameters thus representing a dynamic change to the controller. Gill discloses the dropping of a bit per quartet which is not limited to a one bit scheme. Resulting in a selective reduction of bits. [col. 14 lines 30-67] this bit reduction is carried out during the compression process and during the decoding process the bits compressed are decoded. [fig. 15 (1570,1560, 1551)] During the decompression process the bits are not increased. It is well known in the art that a predetermined number of frames are displayed within an allotted time. Thus the combination of Shiotsu and Gill fairly suggests and teach the limitations as claimed.

Application/Control Number: 10/809,227 Page 3

Art Unit: 2621

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-2, 4-5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiotsu et al. US 7,142,204 B2 in view of Gill et al. US 6,198,773 B1.
- 4. As to claim 1, Shiotsu teaches an image decoder for decoding encoded motion picture data composed of plural frames of image data and for displaying the decoded motion picture data; [abstract; figs. 1-3; figs. 5-7; col. 1 lines 37-42; col. 2 lines 5-7; col. 4 lines 1-11, 53-64] the image decoder comprising: an electric power source having consumable energy for supplying electric power to respective units of the image decoder; [Fig. 2; abstract; col. 2 lines 11-13] means for determining the remaining energy of said source; [figs.1-3; col. 2 lines 11-13; col. 5 lines 5-22] a decoding means for decoding the frames of image data of the encoded motion picture data; [abstract; figs. 1-3; figs. 5-7; col. 1 lines 37-42; col. 2 lines 5-7; col. 4 lines 1-6] means for measuring the amount of energy that was consumed during a decoding time interval; [figs.1-3; col. 2 lines 11-13; col. 5 lines 5-22; col. 5 lines 63-66; col. 6 lines 11-17; col. 6 lines 51-65] means for estimating the amount of energy anticipated to decode and display remaining motion picture data as a function of the measurement amount of

energy that was consumed; [figs.1-3; col. 2 lines 11-13; col. 5 lines 5-22; col. 5 lines 63-66; col. 6 lines 11-17; col. 6 lines 51-65] a displaying means for displaying each image data of the decoded motion picture data; [figs. 1-2; col. 4 lines 7-11, 53-64] a controlling means for controlling the decoding means on the basis of a difference between said anticipated energy needed for decoding and displaying the motion picture data and the remaining energy of the electric power source dynamically control the playing quality. [figs.1-3; col. 2 lines 11-13; col. 5 lines 5-22; col. 5 lines 63-66; col. 6 lines 11-17; col. 6 lines 51-65]

Shiotsu does not explicitly teach an adjustable image frame rate to provide an adjustable number of bits per pixel of the decoded motion picture; or selectively reducing number of bits per pixel.

Gill teaches an adjustable number of bits per pixel of the decoded motion picture; or selectively reducing number of bits per pixel. [col. 17 lines 52-63]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Gill with the device of Shiotsu allowing for reduction in power consumption and bus bandwidth improving the system efficiency.

- 5. As to claim 2, Shiotsu teaches means for deterring the remaining energy comprises a load monitoring means for monitoring the computational load of the decoding means. [figs.1-3; col. 2 lines 11-13; col. 5 lines 5-22; col. 5 lines 63-66; col. 6 lines 11-17; col. 6 lines 51-65]
- 6. As to claim 4, see the discussion of claim 1 above.

Application/Control Number: 10/809,227 Page 5

Art Unit: 2621

7. As to claim 5, see the discussion of claim 2 above.

8. As to claim 7, see the discussion of claim 1 above.

9. As to claim 15, Shiotsu teaches a decoding means for decoding the frames of the

encoded motion picture data; [abstract; figs. 1-3; figs. 5-7; col. 1 lines 37-42; col. 2 lines

5-7; col. 4 lines 1-6] a displaying means for displaying the frames of the decoded motion

picture data; [figs. 1-2; col. 4 lines 7-11, 53-64] and a controlling means for anticipating

the time needed to display a predetermined number of frames on the basis of the

number of frames that can be displayed during a unit time for controlling the decoding

means. [figs.1-3; col. 2 lines 11-13; col. 5 lines 5-22; col. 5 lines 63-66; col. 6 lines 11-

17; col. 6 lines 51-65]

Shiotsu does not explicitly teach control the number of bits per pixel of the

decoded image data.

Gill teaches control of the number of bits per pixel of the decoded image data.

[col. 17 lines 52-63]

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate the teachings of Gill with the device of Shiotsu

allowing for reduction in power consumption and bus bandwidth improving the system

efficiency.

10. As to claim 18, see the discussion of claim 15 above.

11. As to claim 21, see the discussion of claim 15 above.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Love et al. US 5,745,520; Nakaya et al. US 5949484; Simmers US 5907330.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNER HOLDER whose telephone number is (571)270-1549. The examiner can normally be reached on M-Th, M-F 8 am - 3 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/809,227 Page 7

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anner Holder/ Examiner, Art Unit 2621

/Tung Vo/ Primary Examiner, Art Unit 2621